REMARKS

This Amendment is filed in response to the FINAL Office Action mailed May 27, 2005. All objections and rejections are respectfully traversed.

Claims 1-83 are in the case.

Claims 75-83 were added to better claim the invention.

No claims were amended.

Claim Rejections – 35 U.S.C. § 103

On page 2 of the Office Action, claims 1-3, 7-10, and 14-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Awadallah et al., U.S. Patent No. 6,449,251 issued on September 10, 2002 (hereinafter Awadallah), in view of Primak et al., U.S. Patent No. 6,598,077 issued on July 22, 2003 (hereinafter Primak).

The present invention, as set forth in representative claim 1, which recites:

> An *intermediate network device* for use in a computer network carrying network traffic corresponding to sessions, *the intermediate network device comprising*:
> a traffic scheduler having one or more resources for use in forwarding network traffic received at the device at different rates;
> a classification engine configured to identify the received network traffic based upon predefined criteria; and
> a resource reservation engine in communicating relationship with the traffic scheduler and the classification engine,
> wherein, *in response to a request to reserve resources for a first session associated with a session group identifier (ID), the resource reservation engine determines whether the session group ID of the first session matches a session group ID of one or more second sessions for which resources have previously been reserved and, if so, directs the*

traffic scheduler to share the resources reserved for the one or more second sessions with the first session.

Awadallah discloses a method for providing Quality of service (QoS) through a computer network. The QoS for a traffic flow is enabled by using high priority queues. See col. 4, lines 35-42.

Primak discloses directing requests to a cluster of servers from a source requestor, such that a particular server is selected for a particular source. Subsequent requests by the same source using the same data flow are directed by a session ID to the same server. See col. 8, lines 34-47. For example, a source which logs onto a newspaper web page and requests a sequence of articles is directed at each request to the same particular server.

That is, Primak discloses a single session, and directs subsequent requests in the single session to the same server. The session ID of Primak serves simply as a "a cookie or some other unique code for identifying the client by the application server." See col. 8, lines 24-26.

Applicants respectfully urge that neither Awadallah nor Primak teaches an *intermediate network device comprising* [a] *resource reservation engine* [for determining] *whether the session group ID of the first session matches a session group ID of one or more second sessions for which resources have previously been reserved and, if so,* [directing the] *traffic scheduler to share the resources reserved for the one or more second sessions with the first session.*

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The "cookie" disclosed in Primak directs an applicant's request to a single server.

Primak is silent with respect to Applicant's novel *sharing of the resources reserved for*

the one or more second sessions with the first session.

The Applicant in the present specification describes the advantages of sharing re-

served resources between a first session and one or more second sessions as:

> The present invention relates to a system that associates discrete
> traffic flows or sessions within a computer network with a group, and al-
> lows the traffic flows or sessions corresponding to a given group to share a
> single set of network resources. Specifically, when a sourcing entity, such
> as a voice agent, requests resources to be reserved within the computer
> network for a first session, i.e., a traffic flow directed to a first receiving
> entity, the sourcing entity generates a locally unique resource identifier
> (ID). The sourcing entity then uses this resource ID in its request to re-
> serve resources for the first traffic flow. Intermediate network devices
> within the computer network reserve a set of resources and associate the
> reservation with the specified resource ID. The sourcing entity may then
> reuse this same resource ID in another reservation request for a second
> session, i.e. a traffic flow directed to a second receiving entity. In accor-
> dance with the present invention, intermediate network devices are con-
> figured to recognize that a reservation made by the sourcing entity and as-
> sociated with the resource ID already exists. The intermediate devices are
> further configured to share the previously reserved resources between the
> first and second sessions, rather than reserve additional or further re-
> sources for the second session. See Specification page 5, lines 1-17.

The Examiner states in the Office Action, that:

> It is disclosed that in a situation where a first session has already been es-
> tablished, and when the client returns for a second session, but still has the
> same session ID, the resources previously reserved are then shared once
> again. This does constitute the claimed limitations, and the sharing of re-
> sources reserved for the one or more second sessions with the first session
> is constituted by Primak's rerouting of previous information in view of the
> session IDs being the same between the first session and second session.
> The sharing of resources between multiple simultaneous sessions, and
> multiple client devices is not a claimed limitation and therefore cannot be
> further considered for allowance. See Office Action, pages 13-14.

The Applicant respectfully disagrees with the Examiner's comment. In the claimed invention, a sourcing entity generates a resource identifier and uses the resource identifier to request resources to be reserved for a first discrete traffic flow or session to a first receiving entity. Intermediate devices recognize this request and reserve the appropriate resources for the first traffic flow. Then, a sourcing entity uses the same resource identifier to request the resources reserved for the first session to be shared with a second discrete traffic flow or session to a second receiving entity. Intermediate devices recognize this request and share the reserved resources between the first traffic flow and second traffic flow.

Accordingly, the Applicant claims an *intermediate network device comprising* [a] *resource reservation engine* [for determining] *whether the session group ID of the first session matches a session group ID of one or more second sessions for which resources have previously been reserved and, if so,* [directing the] *traffic scheduler to share the resources reserved for the one or more second sessions with the first session*.

Primak discloses a method for a web server to establish a single session from a client to a selected application server. The session created is not a discrete traffic flow between the client and the web server, as the requests from the client and the responses from the web server may take any path through the network. Furthermore, Primak does not teach the client requesting network resources to be specifically reserved for the communication path from the client to the web server.

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Clearly, as a single session between the client and the web server does not reserve specific network resources, there can be no *sharing of the resources reserved for the one or more second sessions with the first session.*

Furthermore, claims 75-83 were added to better claim the Applicant's invention.

Accordingly, Applicant respectfully urges that Awadallah taken in combination with Primak is legally precluded from rendering the presently claimed invention obvious under 35 U.S.C. § 103 because of the absence in each of the cited patents of Applicant's claimed *intermediate network device comprising* [a] *resource reservation engine* [for determining] *whether the session group ID of the first session matches a session group ID of one or more second sessions for which resources have previously been reserved and, if so,* [directing the] *traffic scheduler to share the resources reserved for the one or more second sessions with the first session.*

On page 10 of the Office Action, claims 19-21, 25, 27-29, 33, 35-37, 41, 43-45, 49, 51-53, 57, 59-61, 65, and 67-74 were rejected under 35 U.S.C. 103(a) as being unpatentable over Primak in view of Lambert et al., U.S. Patent No. 6,363,478 issued on March 26, 2002 (hereinafter Lambert).

The present invention, as set out in representative claim 19, comprises in part:

> 19. A method for reserving resources by a network device for transmission of messages through a computer network comprising:
>   initiating a first session by the network device;
>   identifying the first session by writing a session group identifier (session ID) into packets of the first session;

> initiating one or more second sessions using the session ID of the
> first session; and
> *transmitting a setup message to enable other network devices to
> share resources between the first session and the second session in re-
> sponse to both the first and second sessions having the same session ID.*

Lambert discloses a method for negotiating and establishing a session between a
client and server in a stateless HTTP environment, the session requiring specific security
and compression resources to enable a quality of service. See col. 3, lines 36-65. The
requests transmitted in this environment must contain a session ID, receiving a request
without a session ID indicates the request is the first communication of a session. In this
case, a new session is instantiated with a new session ID, and the session ID will be in-
cluded in subsequent communication between the client and server. See col. 3, lines 48-
52 and col. 4, 27-34. A second session can be negotiated and established between the
same client and server, the second session possessing a new session ID, providing a sec-
ond quality of service, and carrying on communication independently from the first ses-
sion. See col. 4, line 58 to col. 5, line 5.

The Applicant respectfully urges that both Primak and Lambert are silent con-
cerning the Applicant's claimed invention of

*transmitting a setup message to enable other network devices to share re-
sources between the first session and the second session in response to both the first
and second sessions having the same session ID.*

The disclosures of Primak and Lambert are silent on Applicant's novel claim of
transmitting a setup message to enable network devices to share resources between the

first session and second session having the same session ID. Primak discloses establishing a single session between a client and an application server for processing of all requests from the client. Primak does not address reserving resources for the session or transmitting a setup message to enable network devices to share resources between the session and another session. Lambert discloses a method of establishing one or more sessions between a client and server in a HTTP environment, each session possessing a new session ID, providing a new quality of service, and carrying on communication independently from other sessions. Clearly, neither Primak nor Lambert disclose *transmitting a setup message to enable other network devices to share resources between the first session and the second session* and doing so *in response to both the first and second sessions having the same session ID*.

Accordingly, the Applicant respectfully urges that Awadallah and Primak, taken either singularly or in combination, are legally insufficient to make obvious the presently claimed invention under 35 U.S.C. § 103 because of the absence of the Applicant's claimed novel

transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

On page 7 of the Office Action, claims 4-6, 11-13, and 17-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Awadallah in view of Primak, in further view of Chiu et al., U.S. Patent No. 6,744,767 issued on June 1, 2004 (hereinafter Chiu).

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On page 12 of the Office Action, claims 22-24, 26, 30-32, 34, 38-40, 42, 46-48, 50, 54-56, 58, 62-64, and 66 were rejected under 35 U.S.C. 103(a) as being unpatentable over Primak and Lambert in view of "Resource Reservation Protocol," Chapter 43.

Applicant respectfully notes that claims 4-6, 11-13, 17-18, 22-24, 26, 30-32, 34, 38-40, 42, 46-48, 50, 54-56, 58, 62-64, and 66 are dependent claims which are dependent from independent claims, and the independent claims are believed to be in condition for allowance. Accordingly, claims 4-6, 11-13, 17-18, 22-24, 26, 30-32, 34, 38-40, 42, 46-48, 50, 54-56, 58, 62-64, and 66 are believed to be in condition for allowance.

Applicant respectfully requests that the Examiner withdraw the finality of the Office Action mailed on May 27, 2005, because a new reference, Lambert U.S. Patent No. 6,363,478 was cited therein.

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at: (617) 951-3028.

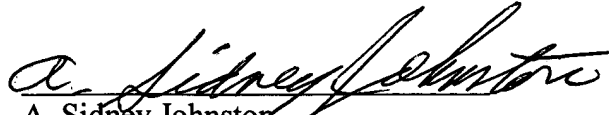All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims, and therefore in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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